OWNER'S MANUAL

Polaris 480 PRO

IMPORTANT INFORMATION

SERIAL NUMBER

Important Information

- Always disconnect the Polaris from the pool wall when cleaning or backwashing the pool filter.
- After cleaning or backwashing, let the filtration system run for at least five minutes before re-connecting the Polaris.
- New plumbing lines should be flushed out before installing the Polaris.
- The Polaris should not be used to remove plaster dust in new pools.
- Always remove the Polaris **before swimmers enter the pool**.
- Except when checking the wheel RPM, do not handle the Polaris while it is operating.
- Always remove the Polaris from the pool before chemical shock treatments.

For customer service or support:

- Please mail Warranty Card immediately.
- For on-line support: www.polarispool.com
- To contact Polaris:

US and Canada

Customer Service

2620 Commerce Way

Vista, CA 92081-8438

1-800-822-7933

Polaris Vac-Sweep® 480 PRO Limited Warranty

This one year limited warranty is extended to the original consumer purchaser of this Polaris 480 PRO Automatic Pool Cleaner manufactured by Polaris Pool Systems, Inc., from date of manufacture of the unit as established by the serial number, or one year from date of purchase with proof of purchase, whichever is later. Polaris warrants this product, including all parts and components thereof, to be free of defects in material and workmanship. Normal replacement items such as bags, tires, sweep hoses or sweep hose scrubbers which have been worn out by use or improper installation are not covered by this warranty. The Polaris 480 PRO frame is warranted for a period of ten years.

This limited warranty does not apply if the failure is caused or contributed to by any of the following: improper handling, improper usage, improper storage, winter freezing, abuse, improper installation, removal of the in-line filter screen, unsuitable application of the unit, improper maintenance, lack of reasonable and necessary maintenance, damage in transit or during installation, or damage from repairs/alterations made or attempted by anyone other than Polaris or one of its Authorized Service Centers. In no event shall Polaris be liable for incidental or consequential damages of any nature or for damages to persons or property, including damage to vinyl liners, plaster, tile, aggregate-based and other pool surfaces, or damages resulting from the use of this product with a substandard pool circulation system or chemical imbalance.

Authorization to return a unit or part to the plant of manufacture must be obtained from the Polaris Customer Service Department. Check with your dealer for the local procedure before exercising this warranty. If further directions or instructions should be required, contact the Customer Service Department at 1-800-VAC-SWEEP (USA and Canada only) or (760) 599-9600. Be sure to insure the shipment against loss or damage in transit.

This limited warranty is valid only in the United States of America, Canada and Australia, and it does not apply to Polaris 480 PRO Automatic Swimming Pool Cleaners sold or installed in any other country. Polaris 480 PRO Automatic Pool Cleaners sold in the United Kingdom are warranted for a period of two years from date of invoicing to the first user.

WARNING: USE OF POLARIS 480 PRO / 480 PRO TANKTRAX IN A VINYL LINER POOL

Certain vinyl liner patterns are particularly susceptible to rapid surface wear or pattern removal caused by objects coming into contact with the vinyl surface, including pool brushes, pool toys, floats, fountains, chlorine dispensers, and automatic pool cleaners. Some vinyl liner patterns can be seriously scratched or abraded simply by rubbing the surface with a pool brush. Ink from the pattern can also rub off during the installation process or when it comes into contact with objects in the pool. Polaris is not responsible for, and the Limited Warranty does not cover, pattern removal, abrasion or markings on vinyl liners.

U.S. Patents: 6,908,550; 6,740,233; 5,863,425; 4,589,986; 2,846,565; D481,181; D468,067; D469,589; D409,341; and other patents pending.

Foreign Patents: 026613, 025079; 025465; 149,923; 150,028; 150,679; 155024; 154907; 732645; 2,260,903; 85149; 135,543; 2,072,463; 981274; 142,198; and other patents pending.

English

Introduction

Congratulations on the purchase of your new automatic pool cleaner, and thank you for choosing Polaris. The Polaris 480 PRO is designed to give you years of dependable and efficient service.

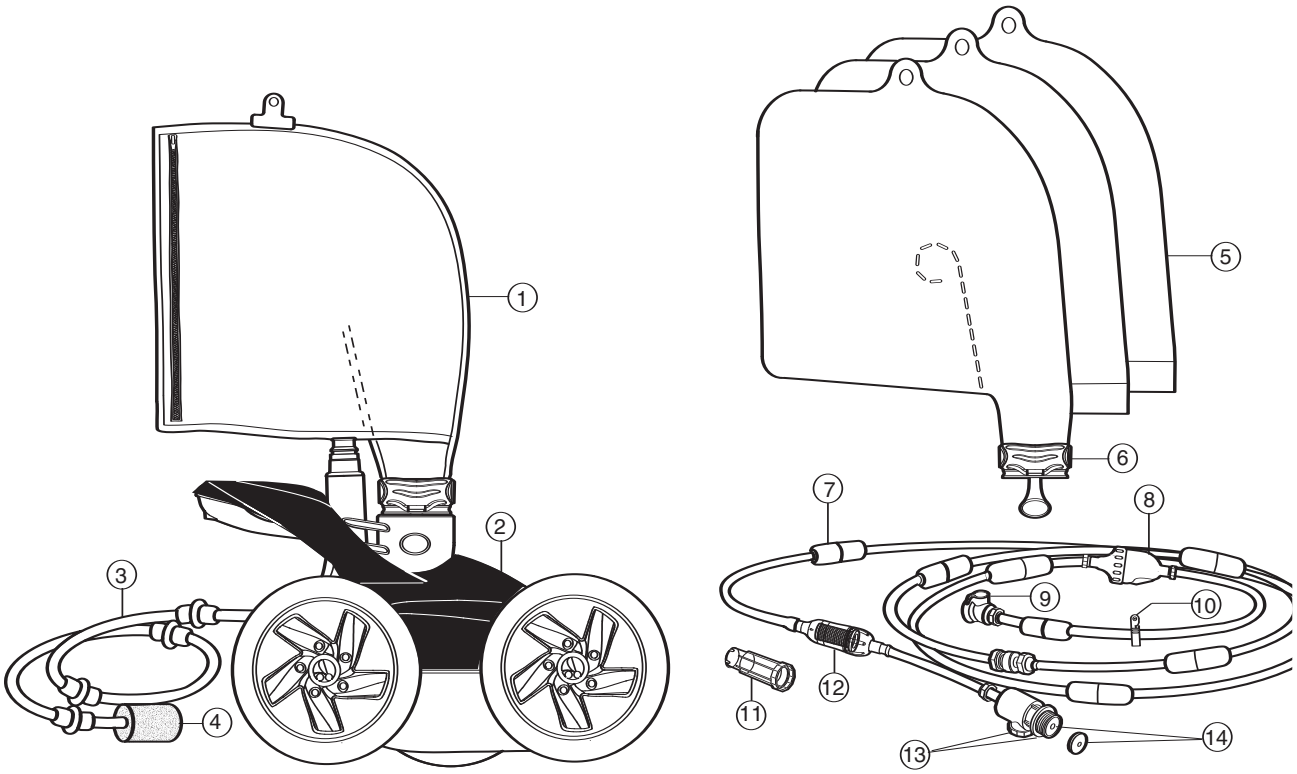
Like most mechanical devices, it will require periodic adjustments, routine maintenance, and the replacement of certain hardworking parts. Please have your cleaner checked occasionally by your local Polaris dealer or authorized service center.

Always insist on genuine Polaris replacement parts. Non-Polaris parts are not made to our specifications. They may have an adverse effect on the operation of your Polaris or may even damage it.

For best results, the Polaris 480 should be installed by a pool professional. For those with experience and confidence in handling plumbing and mechanical equipment, installation is outlined in this manual.

Polaris 480 PRO Complete Cleaner

1. All-Purpose Zippered Bag
2. Cleaner Body
3. Sweep Hose
4. Sweep Hose Scrubber (3 spare)
5. Disposable Filter Bags (3)
6. Bag Clip Assembly (2)
7. Hose Floats
8. Back-up Valve
9. Feed Hose Connector
10. Bag Clasp
11. UWF Removal Tool
12. In-Line Filter with Filter Screen (1 spare screen)
13. Quick Disconnect with Universal Wall Fitting
14. UWF Restrictor Disks, Red and Blue



English

Quick Installation Instructions

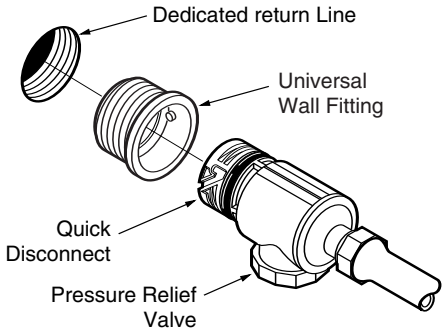
Four quick steps to install and get maximum performance from the Polaris 480 PRO:

- Install the Universal Wall Fitting (UWF) with Quick Disconnect
- Adjust feed hose to fit pool length
- Assemble the cleaner
- Check for proper wheel RPM (revolutions per minute)

1 Install the Universal Wall Fitting

Installs in minutes on pools with a dedicated cleaner return line and a threaded 1-1/2” female pipe fitting.

1. Turn on the filtration pump and flush out the plumbing line.Turn pump off.
2. Remove the UWF from the Quick Disconnect and screw it into the return opening.
3. Turn the Quick Disconnect clockwise into the UWF and pull away to secure.



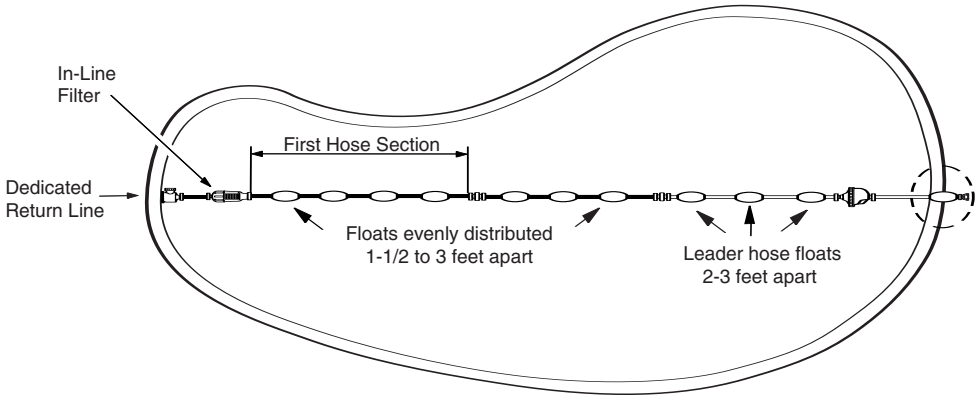
2 Adjust Feed Hose To Fit Pool Length

With the hose connected to the pool wall at the return line, extend hose to the farthest point on the pool. The hose end must be within 6" of this point – longer or shorter – shown by the dotted circle.

Hose too long? Cut excess length from first hose section and reconnect hose sections.

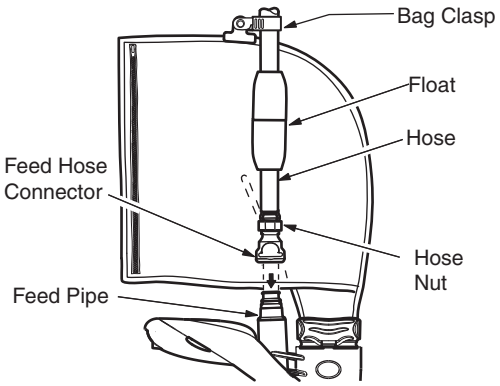
Hose too short? Buy an additional feed hose section (part #9-100-3104), one swivel (part #D20) and two hose nuts (part #D15) from an authorized Polaris dealer.

After adjusting proper hose length, position the hose floats as shown.



3 Assemble the Cleaner

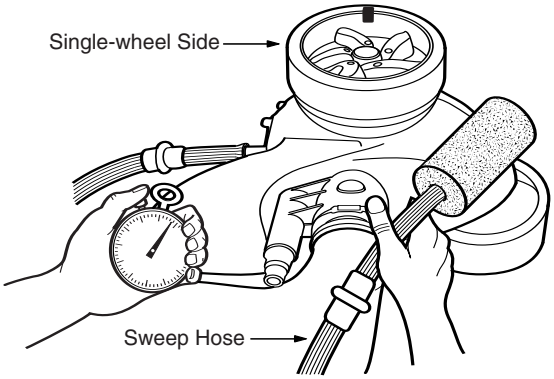
1. Attach the feed hose connector to the feed pipe by pressing down firmly until it locks.
2. The all-purpose filter bag is packaged in the collar area on the vacuum tube. Pull out bag. With bag on single-wheel side of cleaner, attach bag clasp on the feed hose to the loop on the top of the bag.
3. Turn on the pool filtration pump and allow it to prime before turning on the booster pump.



4 Check for Proper RPM

Before operating the Polaris, check for proper wheel revolutions per minute (RPM). For maximum efficiency, the Polaris should operate **between 32 and 36 RPM**.

1. Mark the single-wheel side tire.
2. Turn pump on, hold cleaner below water level and count wheel revolutions for 1 minute.
3. Optimum speed should be **between 32 and 36 RPM.**



If count is **less than 32 RPM**:

- Check the filter screen in the in-line filter for debris which restricts water flow.
- Clean the skimmer, filter and pump basket, clearing debris that restricts water flow.
- Check the hoses, connections and swivels for leaks that cause loss of water pressure.
- If an adjustable gate valve is installed on the booster pump or the Polaris cleaner line, open it completely so water can flow freely to the Polaris.

If count is **more than 36 RPM:**

- Unscrew the pressure relief valve until the proper RPM is reached.
- If an adjustable valve is installed, adjust it to reduce the amount of water flow to the cleaner.
- Place the blue restrictor disk in the UWF.
- If cleaner is still running too fast, remove the blue restrictor disk and replace it with the red restrictor.

English

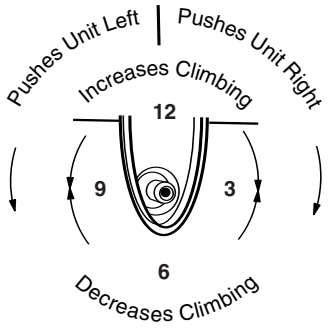
Fine Tuning The Polaris Cleaner

When operating correctly, the Polaris 480 vacuums, sweeps and scrubs all surfaces randomly throughout the pool. The climbing ability of the Polaris depends on the pool's shape and water pressure or flow. The Polaris climbs best in pools without sharp angles or curves in the transition from the pool floor to the pool wall.

Approximately every 3 minutes the Polaris 480 goes into back-up mode. This action pulls the Polaris away from pool obstacles and increases its random pattern.

Thrust Jet Adjustment

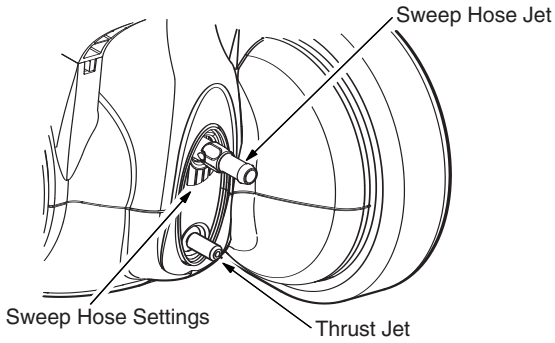
The thrust jet powers the direction of the Polaris. Factory position is straight back, but depending on the pool, other settings are helpful.



Sweep Hose Adjustment

The sweep hose should move in a gentle sweeping motion. To increase or decrease the motion of the sweep hose, turn off the booster pump and change the sweep hose settings. There are five easy-click settings located at the back of the cleaner.

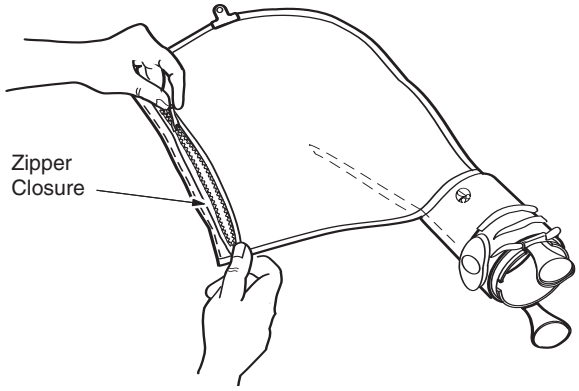
See Troubleshooting for other action adjustments.



Routine Maintenance

Cleaning the All-Purpose Filter Bag

Depress the bag clasp to free the bag from the feed hose. Depress the prongs to release the bag from the cleaner. Open the bag closure and remove the debris.

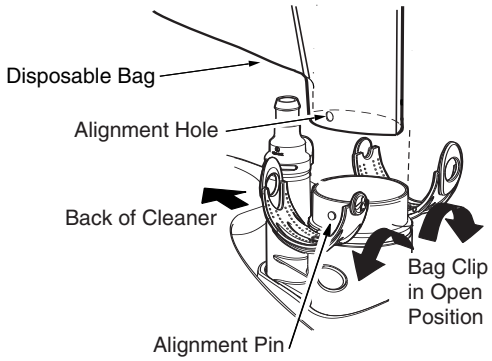


- Whenever possible, empty the filter bag when it is half full, especially if the dirt load is sand.
- It is easier to empty the filter bag when it is dry. Alternate between two filter bags. When one becomes full, remove it and put on the clean bag.

Disposable Filter Bag

To replace disposable bag:

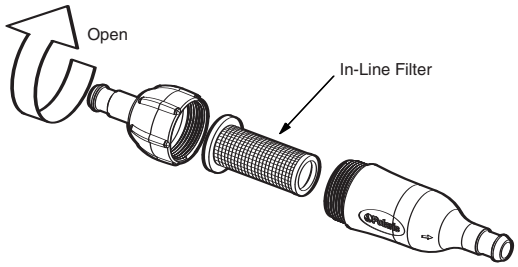
1. Push tabs of bag clip assembly to the open position.
2. Disengage the alignment pin and remove the old bag.
3. Fit cuff of disposable bag over opening. Bag seam should face the back of the cleaner and hole in filter bag cuff should engage with alignment pin.
4. Close bag clip assembly to lock in place.



In-Line Filter

The in-line filter contains a filter screen to keep debris that is not caught by the pool filtration system out of the Polaris.

To clean this screen, pull it out of the in-line filter, rinse it and press it firmly back into place.



Backwashing the Pool Filter

Always disconnect the Polaris from the pool wall before cleaning or backwashing the pool filter. After cleaning or backwashing, let the filtration system run for at least five minutes to flush out the return lines before re-connecting the Polaris.

Storage and Winterizing

Never store the Polaris in direct sunlight. When storing for the winter, drain out all the water (freeze damage is not covered under the warranty). Remove the UWF from the pool wall using the UWF Removal Tool (part #10-102-00) included with the cleaner.

English

Troubleshooting

If the Polaris cleaner regularly displays the following actions, adjustments may be necessary to restore performance. Refer to exploded parts diagram for part references.

Action: Hangs up on steps or other obstacles longer than 3 minutes.

Solution:

1. Check the wheel RPM.
2. Verify the back-up valve is cycling.
3. Adjust the thrust jet.
4. Remove unnecessary pool hardware or install a Ladder Guard Kit (order part #G21 from a Polaris dealer).

Action: Polaris is sluggish, running with less power than normal.

Solution:

1. Check the filter screen in the in-line filter assembly and clean if necessary.
2. Clean the skimmer basket, pump basket, and pool filter.
3. Check the hoses, connections, and swivels for leaks that could cause loss of water pressure.
4. Check the wheel RPM.

Action: Polaris flies around the pool and/or does not make contact with the bottom of the pool.

Solution:

1. Check the wheel RPM. If more than 36 RPM, unscrew the pressure relief valve to decrease water flow to cleaner.
2. Install the blue restrictor disk in the UWF to decrease water flow. Or, install the red restrictor disk to decrease the water flow even more.
3. Verify the back-up valve is cycling. Hold the valve out of the water and watch the jet. It should come on and go off.

Action: Polaris doesn't back up.

Solution:

1. Verify the back-up valve is cycling.
2. Check the wheel RPM.
3. If the filter bag is full, empty or replace it.
4. Make sure feed hose is floating.

Action: Polaris only turns in one direction.

Solution:

1. Adjust the thrust jet.
2. Make sure feed hose is floating.

Action: Feed hose becomes tangled.

Solution:

1. Remeasure the hose to verify that it is adjusted to the proper length for the pool shape.
2. With the Polaris operating, check that the swivels in the hose and the hose connections turn freely.
3. Make sure the feed hose is floating.
4. With the Polaris operating, hold the cleaner under water and verify that all three wheels are turning together.

Action: Sweep hose is sucked into the vacuum tube.

Solution:

1. Make sure the opening at the end of the sweep hose is not blocked by the sweep hose scrubber. Replace scrubber if it is worn or missing.
2. Adjust the sweep hose to a gentle sweeping motion.
3. Check the wheel RPM. If more than 36 RPM, unscrew the pressure relief valve to decrease water flow to the cleaner.

4. Install the blue restrictor disk in the UWF to decrease water flow. Or, install the red restrictor disk to decrease the water flow even more.
5. If an adjustable valve is installed, adjust it to reduce the amount of water flow to the cleaner.
6. Add a sweep hose weight (order part #B2).

Action: Sweep hose sprays too much water out of the pool.

Solution:
1. Adjust the speed of the sweep hose by adjusting the easy-click settings.
2. Replace the sweep hose scrubber if it is worn or missing.
3. Add a sweep hose weight (order part #B2) to keep the sweep hose from spraying.

Action: The cleaner does not clean the entire pool.

Solution:
1. Verify that feed hose reaches within 6” of the farthest point of the pool. If not, order a new hose section from your Polaris dealer.
2. Check thrust jet for straight back position that optimizes random turning.
3. While the cleaner is operating, hold it upside down and look into the vacuum tube. There should be four distinct, even jets of water. If there are not, contact Customer Service or a Polaris authorized Service Center for assistance.

Action: The cleaner is running in circles on its side.

Solution:
1. Check the filter bag, if full it can weigh the cleaner down on one side.
2. Check the hose floats to make sure they are spaced evenly.

Troubleshooting Worksheet

If these solutions do not result in improved performance, contact the Polaris dealer who sold you the cleaner or call Customer Service.

In order to provide faster and more convenient service, please have the following information available at the time of your call or when taking the Polaris in for service.

1. **Serial #:**_____
2. **Wheel RPM:**_____
3. **Is the back-up valve cycling?**

   ☐ Yes ☐ No
4. **Is the feed hose the proper length?**

   ☐ Yes ☐ No
5. **Are the swivels rotating freely?**

   ☐ Yes ☐ No
6. **How often do you clean the filter screen inside the in-line filter?**

   ☐ Never ☐ Once a Week

   ☐ Twice a Week ☐ Once a Month
7. **Are the vacuum jets obstructed?**
   (While the cleaner is operating, hold it upside down and look into the vacuum tube. There should be four distinct, even jets of water.)

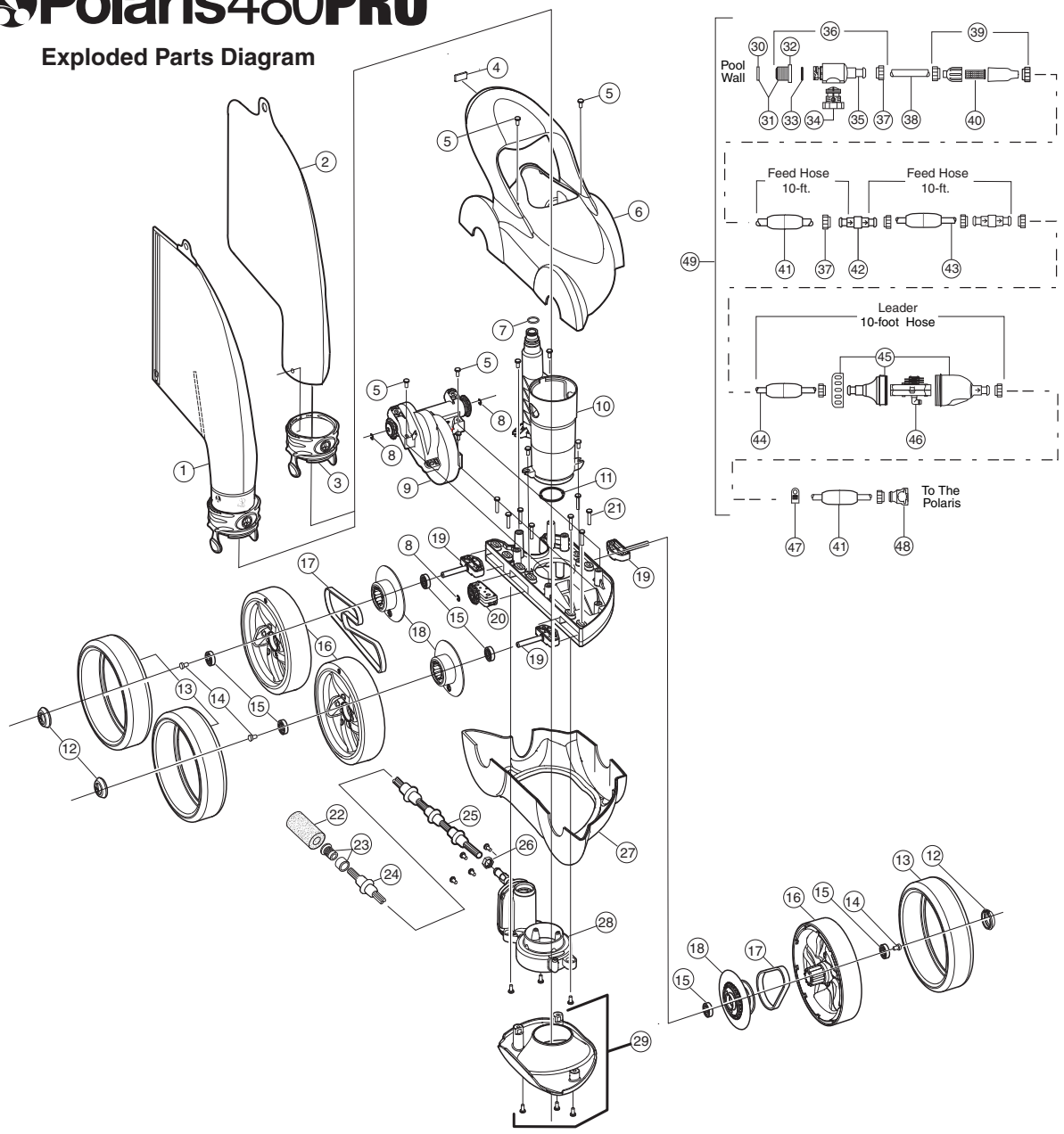
   ☐ Yes ☐ No
8. **Is the drive train functioning?**
   (As you spin each wheel independently, all the wheels should spin.)

   ☐ Yes ☐ No

English

Polaris 480 PRO

Exploded Parts Diagram



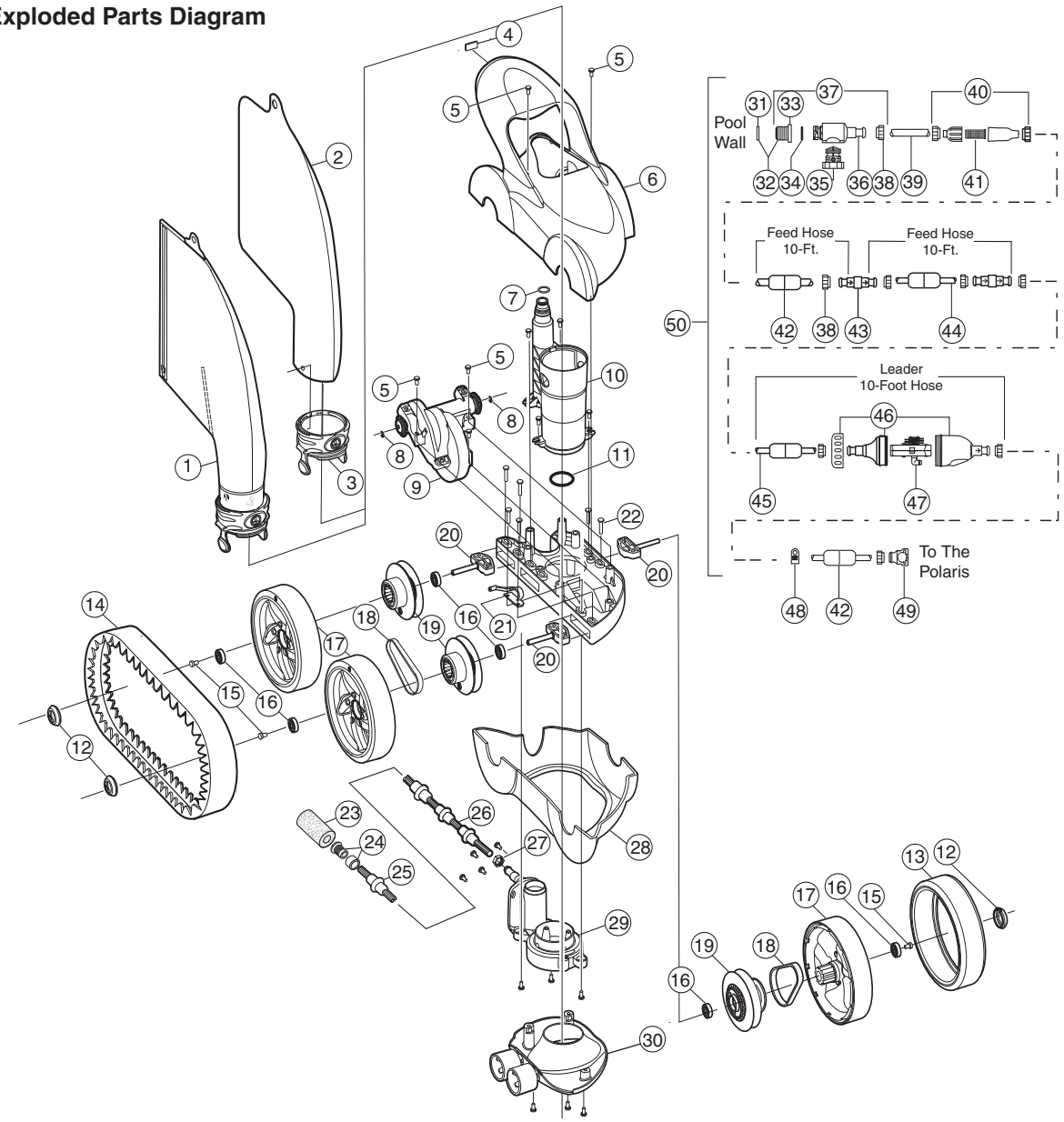
No.	Part#	Description	Qty	No.	Part#	Description	Qty	No.	Part#	Description	Qty
1	48-135	All Purpose Bag*	1	17	48-006	Chain Kit	1	34	6-503-00	Pressure Relief Valve	1
2	48-133	Disposable Bag, 3 per pack*	1	18	48-035	Wheel Sprocket Kit	3	35	D29	Quick Disconnect, UWF	1
3	48-130	Bag Clip Assembly	2	19	48-060	Axle Block, Wheel	3	36	9-100-9001	UWF Connector Assembly	1
4	48-047	License Plate with Logo	1	20	48-050	Idler Tensioner Assembly	1	37	D15	Nut, Feed Hose	10
5	C40	Screw, 10-32 x 3/8" SS Pan Head	23	21	48-045	Screw, 10-32 x 7/8" SS Pan Head with Star Washer	8	38	**	Adapter Hose, 8-1/2"	1
6	48-003	Upper Housing/Handle Assy	1	22	9-100-3105	Sweep Hose Scrubber*	4	39	48-080	In-line Filter Assembly	1
7	48-141	O-ring, Feed Hose Connector	1	23	B25	Orifice Tip w/Orifice Tip Guard	1	40	48-222	Screen, In-line Filter	2
8	9-100-5107	E-clip, Stainless Steel	3	24	B10	Sweep Hose Wear Ring*	8	41	D10	Float, Feed Hose	11
9	48-020	Gearbox Assembly	1	25	B5	Sweep Hose Complete*	1	42	D20	Swivel Ball Bearing	2
10	48-004	Vacuum Tube/Feedpipe with two O-rings	1	26	48-019	Nut, Sweep Hose	1	43	D45	Feed Hose, 10 ft.	2
11	48-016	O-ring, WMS Upper to Feedpipe	1	27	48-002	Lower Housing	1	44	D50	Leader Hose, 10 ft.	1
12	48-033	Hubcap	3	28	48-010	WMS Assembly with 1 O-ring	1	45	G52	Back-up Valve Kit	1
13	48-032	WideTrax® Tire*	3	29	48-008	Vacuum Plate Assembly	1	46	G53	Mechanism for G52	1
14	48-036	Wheel Lock Screw	3	30	10-112-00	UWF Restrictor Disk, Red & Blue	2	47	48-136	Bag Clasp	1
15	48-034	Bushing	7	31	10-108-00	UWF Restrictor Kit	1	48	48-140	Feed Hose Connector Assembly	1
16	48-031	Wheel	3	32	6-500-00	UWF	1	49	48-070	Feed Hose Assembly	1
				33	6-505-00	O-ring, UWF	1				

* Wear items not covered by warranty.

Polaris 480 PRO TankTrax

Exploded Parts Diagram

English



No.	Part#	Description	Qty
1	48-135	All Purpose Bag*	1
2	48-133	Disposable Bag, 3 per pack*	1
3	48-130	Bag Clip Assembly	2
4	48-047	License Plate with Logo	1
5	C40	Screw, 10-32 x 3/8" SS Pan Head	23
6	48-003	Upper Housing/Handle Assy	1
7	48-141	O-ring, Feed Hose Connector	1
8	9-100-5107	E-clip, Stainless Steel	3
9	48-020	Gearbox Assembly	1
10	48-004	Vacuum Tube/Feedpipe with two O-rings	1
11	48-016	O-ring, WMS Upper to Feedpipe	1
12	48-033	Hubcap	3
13	48-032	WideTrax® Tire*	1
14	48-037	TankTrax® Tire*	1
15	48-036	Wheel Lock Screw	3
16	48-034	Bushing	7
17	48-031	Wheel	3
18	48-011	Chain Kit 480T	1
19	48-035	Wheel Sprocket Kit	3
20	48-060	Axle Block, Wheel	3
21	48-012	Chain Tensioner 480T	1
22	48-045	Screw, 10-32 x 7/8" SS Pan Head with Star Washer	8
23	9-100-3105	Sweep Hose Scrubber*	4
24	B25	Orifice Tip w/Orifice Tip Guard	1
25	B10	Sweep Hose Wear Ring*	8
26	B5	Sweep Hose Complete*	1
27	48-019	Nut, Sweep Hose	1
28	48-002	Lower Housing	1
29	48-010	WMS Assembly with 1 O-ring	1
30	48-013	Vacuum Plate Assembly	1
31	10-112-00	UWF Restrictor Disk, Red & Blue	2
32	10-108-00	UWF Restrictor Kit	1
33	6-500-00	UWF	1
34	6-505-00	O-ring, UWF	1
35	6-503-00	Pressure Relief Valve	1
36	D29	Quick Disconnect, UWF	1
37	9-100-9001	UWF Connector Assembly	1
38	D15	Nut, Feed Hose	10
39	**	Adapter Hose, 8-1/2"	1
40	48-080	In-line Filter Assembly	1
41	48-222	Screen, In-line Filter	2
42	D10	Float, Feed Hose	11
43	D20	Swivel Ball Bearing	2
44	D45	Feed Hose, 10 ft.	2
45	D50	Leader Hose, 10 ft.	1
46	G52	Back-up Valve Kit	1
47	G53	Mechanism for G52	1
48	48-136	Bag Clasp	1
49	48-140	Feed Hose Connector Assembly	1
50	48-070	Feed Hose Assembly	1

* Wear items not covered by warranty.